

# Poly-Triplex® Liner System Technical Data

## Poly-Triplex Liner System Physical Properties

Test	Property	PTLS-4400 Type I	PTLS-5600 Type II	PTLS-6800 Type III	PTLS-11600 Type IV
<i>Pre-Saturated Fabric Weight:</i>		44 Ounces PSY	56 Ounces PSY	68 Ounces PSY	116 Ounces PSY
<b>ASTM Tests D790, D695, D638 &amp; D5813</b>					
<b>Performed by: HTS, Inc. Consultants - 2005</b>					
<b>ASTM-D-790</b>					
	Maximum Flexural Fiber Stress	30,093 psi	39,460 psi	44,535 psi	49,912 psi
	Flexural Modulus of Elasticity	1,125,419 psi	1,158,240 psi	1,090,654 psi	1,783,142 psi
<b>ASTM-D-695</b>					
	Compressive Strength	4,473 psi	7,896 psi	11,900 psi	14,150 psi
	Compressive Modulus	572,100 psi	805,900 psi	989,000 psi	1,570,000 psi
<b>ASTM-D-638</b>					
	Strength at Break	14,950 psi	21,180 psi	28,400 psi	40,970 psi
	Elongation at Break	6.91%	8.18%	8.59%	11.92%
<b>ASTM-D5813</b>					
	Average Specimen	0.099 in.	0.117 in.	0.122 in.	0.158 in.
<b>ASTM Tests D2240, D638, &amp; C497-98/AASHTO T280-00</b>					
<b>Performed by: Southwestern Laboratories, Dallas, TX</b>					
<b>ASTM-D-2240</b>					
	Hardness			82 Shore D	
<b>ASTM-D-638</b>					
	% Elongation @ Max. Load	1.20 %	1.54 %	1.57 %	1.71 %
	Std. Dev.	0.1	0.19	0.19	0.14
	Ultimate Elongation			6.00 %	
<b>ASTM-C497-98 / AASHTO-T280-00 Corrugated Culvert Pipe PTLs-11600 Lined</b>					
	Culvert Pipe Alone-Max Load				2753 lbs.
	PTLS-11600 Lined-Max Load				6190 lbs.
	Pipe Alone-Ultimate Strength				1377 lbf/ft
	PTLS-11600 Lined-Ultimate Strength				3095 lbf/ft
	Pipe Alone-D-Load Strength				689 lbf/ft/ft
	PTLS-11600 Lined-D-Load Strength				1548 lbf/ft/ft
<b>Test Performed By: Whitney &amp; Associates, Peoria, IL</b>					
<b>Bond</b>	Butt to Butt Resin Bonded				
	Bonding Strength			7,130 Lbs.	
	6" Dia., 10,000 psi Test Cylinder			Concrete Failed	
<b>Permeability</b>		Impermeable	Impermeable	Impermeable	Impermeable
<b>Excavation Required?</b>		No	No	No	No
<b>Life Expectancy</b>		100 Years	100 Years	100 Years	100 Years
<b>Warranty</b>		10 Years	10 Years	10 Years	10 Years